

REMARKS/ARGUMENTS

Claims 1, 20, 22, and 25 have been amended.

A RCE is being filed concurrently as suggested by the Examiner in a telephone discussion to change the previously made election.

Accordingly, in complete response to the Requirement for Restriction mailed May 2, 2007, Applicants provisionally elect, albeit with traverse, to prosecute the claims of Group VIII, namely claims 1 to 11 and 22 to 31.

The claims have been reformulated so they are now directed to the newly elected SEQ ID NO: 12 (which is also referred to as A10 in the specification) in view of the last Restriction Requirement and the Final Office Action. Applicant believes that the Examiner can pursue examination of the new set of claims.

Furthermore, Applicant respectfully submits that the above-mentioned change to the claims will not affect patentability in view of the previously cited co-pending application of Bigey et al. (US 2006/0009403 A1). Bigey et al. does not anticipate the specific antisense oligonucleotide of SEQ ID NO: 12. Bigey et al. teach a plasmid molecule able to express in the antisense a large segment (>1400 nucleotides) of a cDNA of human MBD2 (see paragraph 0016). Therefore, a person skilled in the art would not have been able to easily identify from the long antisense cDNA a much shorter antisense oligonucleotide consisting of the sequence set forth in SEQ ID NO: 12. This is explained in part, as the Examiner well knows, by the fact that the ability of nucleic acid molecules to modify gene expression *in vivo* is quite variable and therefore lacking in terms of reliability (Opalinska et al., of record). Furthermore, the unpredictability of the *in vivo* inhibitory activity of this class of molecule remains unresolved, according to very recent teachings (Schmidt (2007), of record). These views are further supported by data presented in the instant application, where antisense oligonucleotide molecules A3 to A7 (SEQ ID NOs: 7-11) are effecting decreases in gene expression of MBD2/Demethylase that vary significantly (Fig. 4 of the specification). Significantly

variable outcomes such as these ones demonstrate that **not** just any antisense oligonucleotides directed to MBD2/Demethylase would work and, ultimately, result in a working therapeutic.

Rejections under 35 U.S.C. § 112, first paragraph

The Examiner has rejected former claims 22, 24-25, and 27-31 as failing to comply with the enablement requirement. This rejection has been considered and the claims have been further amended to restrict the oligonucleotide inhibitor to an antisense oligonucleotide **consisting of** the sequence set forth in **SEQ ID NO: 12** described in the specification. Support for *in vivo* use of the antisense oligonucleotide derived from SEQ ID NO: 12 (also referred to as A10 in the specification) can be found in Examples 5 and 6, on pages 46 to 48 of the specification as filed, for example.

Reconsideration and withdrawal of this rejection is therefore respectfully requested.

Rejections under 35 U.S.C. § 102

The Examiner has rejected former claim 1 under 35 U.S.C. § 102(b) as being anticipated by Zannis et al.. This rejection has been considered and the claims have been amended to be restricted to SEQ ID NO: 12, and the term "comprising" was replaced with the expression "consisting of". Zannis et al. does not teach or suggest
SEQ ID NO: 12 and only teach the sequence
ACCTCTCCCCCTCCCCACCCCAACAGGA (SEQ ID NO: 66), which is a totally different sequence. There is no significant alignment or homology between these two sequences.

Reconsideration and withdrawal of this rejection is therefore respectfully requested.

The Examiner has rejected former claim 1 under 35 U.S.C. § 102(e) as being anticipated by Wohlgemuth et al.. This rejection has been considered and the claims have been amended to be restricted to SEQ ID NO: 12, and the term "comprising" was replaced with the expression "consisting of". Wohlgemuth et al. does not teach or

suggest SEQ ID NO: 12 and only teach the sequence ACTTCCTCCCCCTCCCCCTAGCATT (SEQ ID NO: 8110), which is a totally different sequence. There is no significant or homology alignment between these two sequences.

Reconsideration and withdrawal of this rejection is therefore respectfully requested.

Objections

The Examiner objects to former claims 1, 22 and 25 because they contain non-elected subject matter: siRNA. This objection has been considered and the claims have been amended to delete the non-elected subject matter.

Reconsideration and withdrawal of this objection is therefore respectfully requested.

Rejection under 35 U.S.C. § 112, first paragraph

The Examiner has rejected former claims 1 and 6-10 as failing to comply with the enablement requirement. This rejection has been considered and the claims have been amended to be restricted to SEQ ID NO: 12 and by deleting the expression "complementary to a mammalian MBD2/demethylase mRNA".

Reconsideration and withdrawal of this rejection is therefore respectfully requested.

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt, favorable action thereon is earnestly solicited.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

If there are any questions regarding this amendment or the application in general, the Examiner is respectfully requested to telephone the undersigned at (514) 871-2929 so that such questions can be expeditiously resolved.

FEE AUTHORIZATION

Should any fees associated with the submission be required, the Commissioner is authorized to charge such deficiencies to our Deposit Account No. 02-2095. Any overpayments should be credited to said Deposit Account.

Respectfully submitted,

Moshe Szyf et al.

By


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